

KULAKHMET'YEVA, M.G.

Therapy of trachoma of the third stage. Vest. oft. 33 no. 2:13-15
Mr-Ap '54. (MLRA 7:2)

1. Iz glaznoy kliniki (direktor - professor A.N. Murzin) Kazan-
skogo meditsinskogo instituta. (Conjunctivitis, Granular)

KULAKHMET'YEVA, M.G., kandmed.nauk; LADYZHINSKAYA, M.A., ordinator

Treatment of eye burns by subconjunctival injections of penicillin
combined with the patient's own blood. Oft.zhur. 14 no.6:334-337
'59. (MIRA 13:4)

1. Iz kafedry glaznykh bolezney (zav. - dots. A.S. Veys) Kazanskogo
meditsinskogo instituta.

(EYE--WOUNDS AND INJURIES) (BLOOD AS FOOD OR MEDICINE)
(PENICILLIN)

KULAKOV, A.

Paramount duty. Pozh. delo 8 no.9:10-11 S '62. (MIRA 16:11)

1. Zamestitel' nachal'nika otdela Upravleniya pozharnoy okhrany
Permskoy oblasti.

KULAKOV, A., gornyy inzhener

Self-propelled giant machines work underground. IUn. tekhn. 7
no.8:40-43 Ag '63. (MIRA 16:10)

KULAKOV, Aleksandr

A legendary name. Voen. znan. 40 no.8:7 Ag '64.

(MIRA 17:11)

KULAKOV, A.A., inzh.

New crane for mounting bridges. Stroi. i dor.mashinostr. 4
no.6:9 Je '59. (MIRA 12:8)
(Bridge construction) (Cranes, derricks, etc.)

KULAKOV, A. A. and SHTAL, V. A.

"The Chemical Arm and Defense Against Chemical Attack," Chapter III of the book "Military Meteorology" published in Moscow, 1940

Translation of this Chapter No. III - D 358816, 1955

SURKOV, S. K. Eng., VASIL'EV, P. A. Eng., LITVIN, P. YU. Eng., NAYEIS, V. A. Eng.,
KULAKOV, A. A. Eng., SOKOLOV, M. M. Decent, PRUDENSKIY, P. G. Prof.

Electric Power Distribution

Electric power supply for industrial enterprises. Elektrichestvo No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

KULAKOV, A A

ALEKPEROV, V.P., inzh.; ATOVMYAN, I.O., inzh.; ZUYEV, V.I., inzh.; KAVUN, Ye.S., kand.tekhn.nauk; KOGAN, B.Ya., kand.tekhn.nauk; KOPAY-GORA, P.N., kand.tekhn.nauk; KULAKOV, A.A., inzh.; LEBEDEV, A.N., kand.tekhn.nauk; PAPERNOV, A.A., doktor tekhn.nauk; PEL'POR, D.S., doktor tekhn.nauk; PLOTNIKOV, V.N., kand.tekhn.nauk; RUZSKIY, Yu.Ye., kand.tekhn.nauk; SOLODOVNIKOV, V.V., doktor tekhn.nauk; TOPCHYEYEV, Yu.I., kand.tekhn.nauk; ULANOV, G.M., kand.tekhn.nauk; SHRANKO, L.S., kand.tekhn.nauk; DOBROGURSKIY, S.O., doktor tekhn.nauk, retsenzent; KAZAKOV, V.A., kand.tekhn.nauk, retsenzent; PETROV, V.V., kand.tekhn.nauk, retsenzent; KHAVKIN, G.A., inzh., retsenzent; SOLODOVNIKOV, V.V., prof., doktor tekhn.nauk, red.; VITENBERG, I.M., kand.tekhn.nauk, nauchnyy red.; MOLDAVER, A.I., kand.tekhn.nauk, nauchnyy red.; KHETAGUROV, Ya.A., kand.tekhn.nauk, nauchnyy red.; POLYAKOV, G.F., red.izd-va; KONOVALOV, G.M., red.izd-va; SOKOLOVA, T.F., tekhn.red.

[Fundamentals of automatic control] Osnovy avtomaticheskogo regulirovaniia. Vol.2. [Elements of automatic control systems] Elementy sistem avtomaticheskogo regulirovaniia. Pt 2. [Compensating elements and computer components] Korrektiruiushchie elementy i elementy vychislitel'nykh mashin. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry. 1959. 453 p. (MIRA 12:4)
(Automatic control) (Electronic apparatus and appliances)
(Electronic calculating machines)

KULAKOV, A. A.

Über die anzahl der eigentlichen untergruppen und der Elementen von gegebener Ordnung in p-Gruppen. Math. Ann., 104 (1930), 778-793.

O podgruppakh sostavnogo poryadka konechnoy gruppy. Matem. SB., 39:3 (1932), 67-70.

SO: Mathematics in the USSR, 1917-1947

Edited by Kurosh, A. G.

Markusevich, A. I.

Rashevskiy, P. K.

Moscow-Leningrad, 1948

KULAKOV, A. A.

Kulakov, A. A. Sur les groupes d'ordre impair. C. R. (Doklady) Acad. Sci. URSS (N.S.) 53, 683-685 (1946)

After studying the quasi-transform $RIIR$ of a subgroup H by an element R not in H and defining a quasi-normal divisor of G to be a subgroup H of G such that $RIIR = H$ for each R in G , the author shows that a group of odd order has no proper quasi-normal subgroups. If P is an element of least prime order p in a group G of odd order, the normalizer of the subgroup $\langle P \rangle$ is the same as the normalizer N_P of the element P ; the elements of G not in N_P fall into double cosets with respect to $\langle P \rangle$, not self inverse, and each containing p^2 elements. J. S. Frame (East Lansing, Mich.)

Source: Mathematical Reviews;

Vol

No.

KULAKOV, A. A.

Kulakov, A. A. Sur la représentation régulière d'un p -groupe. C. R. (Doklady) Acad. Sci. URSS (N.S.) 54: 113-116 (1950).

In five previous papers [Rec. Math. Sbornik (N.S.) 2(44), 357-359 (1937); 3(45), 187-189 (1938); 4(46), 371-373 (1938); 8(50), 69-72 (1940); these Rev. 2: 1363], the author has investigated the regular representation of a finite residue domain.

A special principle of consideration leads him to a more detailed consideration of the structure of the permutations of the (right) regular representation Γ of an arbitrary p -group G of order p^n (p prime). Denote by (R) the permutation in Γ which represents the element R of G . Then the principal result can be stated as follows. The elements of G considered as objects permuted by permutations in Γ can be simply taken as the numerals $0, 1, \dots, p^n - 1$ in a certain order such that for an arbitrary (R) of Γ the following two conditions are satisfied: (1) If (a_1, a_2, \dots, a_n) is any cycle of (R) , then a_1, \dots, a_n mod p form an arithmetical progression mod p with a common difference which is the same for all the cycles of (R) . (2) Either all the integers $[a, p]$ for $a = 1, \dots, n$ belong to the same residue class mod p or they are equally distributed into all the p distinct residue classes; the alternative to be taken is the same for all the cycles of (R) . The proof is based on induction on n by making use of the factor group G/P of G modulo the cyclic subgroup P generated by an element P of order p in the center of G .

H. F. Tuck, *Polynomial*

Source: Mathematical Reviews,

Vol

No.

DOLINA, L.F.; KULAKOV, A.A.

Modernizing the unit for drying ammonium in a fluidized bed. Biul.
tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekhn.inform 17 no.7:
21-22 -J1 '64. (MIRA 17:10)

KULAKOV, A.I.; MOZHAYEV, N.S.

Oil potential of the lower Carboniferous terrigenous complex in
Orenburg Province. Geol. nefti 2 no.5:32-37 My '58. (MIRA 11:5)

1. Naftepromyslovoye upravleniye Buguruslannefi' i Geologo-
razvedochnyy kombinat tresta Orenburgneftegazrazvedka.
(Orenburg Province--Petroleum geology)

KLUBOV, V.A.; KULAKOV, A.I.

Types and some features of the formation of local uplifts in
Orenburg Province. Trudy VNIGNI no.30:233-250 '61. (MIRA 14:9)
(Orenburg Province--Petroleum geology)
(Orenburg Province--Gas, Natural--Geology)

KLUBOV, V.A.; KULAKOV, A.I.; SERENKO, M.N.; FOMINA, G.V.; SHPIL'MAN, I.A.

Tectonic pattern of Orenburg Province and adjacent regions in
connection with the evaluation of oil and gas potentials.
Trudy VNIGNI no.34,5-39 '61. (MIRA 15:7)
(Orenburg Province--Petroleum geology)
(Orenburg Province--Gas, Natural--Geology)

KULAKOV, A.I.; SVISHCHEV, M.F.; PANTELEYEV, A.S.

Characteristics of the development of Lower Carboniferous oil
pools of the central part of the Bol'shoy Kinel' swell.
Geol. nefti i gaza 6 no.6:21-27 Je '62. (MIRA 15:6)

1. Orenburgskiy sovnarkhoz i Neftepromyslovoye upravleniye
Duguruslanneft'.
(Bol'shoy Kinel' Valley--Petroleum geology)

DOGRAMADZHI, M.F.; GEFTER, S.E.; KULAKOV, A.I.

Magnetic field in the aluminum electrolysis plant. TSvet. met.
37 no.6:38-42 Je '64. (MIRA 17:9)

KULAKOV, A.I.; FOMINA, G.V.; SHPIL'MAN, I.A.

Outlook for the development of oil and gas prospecting operations on the eastern slope of the Russian Platform in the area of Orenburg Province. Geol. nefti i gaza 9 no.9:8-12 S '65. (MIRA 18:9)

1. Orenburgneft', Orenburgskoye geologicheskoye upravleniye i Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy Institut, Moskva.

KULAKOV, Andrey Matveyevich; KLIMCHUK, M.S., redaktor; AKHMEDOV, V.M.,
redaktor izdatel'stva; KONYASHINA, A.D., tekhnicheskii redaktor

[Fire prevention in lumbering enterprises] Protivopozharnye mero-
priiatiia na lesozagotovitel'nykh predpriiatiakh. Moskva, Izd-vo
Ministerstva kommunal'nogo khoziaistva RSFSR, 1956. 161 p.

(MLRA 10:2)

(Lumbering--Fires and fire prevention)

KULAKOV, A.M.

Increase the fire safety in the woodworking and paper industries.

Pozh.delo 4 no.8:4-5 Ag '58.

(MIRA 11:9)

(Paper industry -Safety measures)

(Woodworking industries--Safety measures)

Kulakov, A. M.
 . AUTHOR: KULAKOV, A. M., GEL'FAND, I. M., Engineers, PA - 2385
 Metallurgical Combine of Magnitogorsk.
 TITLE: Performance Practice of Automation of the Rolling Mills Heating
 Installations. (Opyt ekspluatatsii avtomatiki nagrevatel'nykh
 ustroystv prokatnykh stanov, Russian).
 PERIODICAL: Stal', 1957, Vol 17, Nr 1, pp 80 - 83 (U.S.S.R.).
 Received: 5 / 1957 Reviewed: 5 / 1957
 ABSTRACT: About 140 vertical ingot heating furnaces are available for
 the rolling mill train of Magnitogorsk. Saving of 1 % fuel
 amounts to 800.000 roubles per annum. First the attempt at thermal
 control and automation in connection with the regeneration ingot
 heating furnaces of the blooming mill train Nr 3 is described.
 Waste caused by heating these furnaces consists to 85 - 90 % of
 the ingots of quiet steel. The best means of reducing waste caused
 by heating is the automation of the heating process of the ingots.
 It consists in regulating the temperature in the ingot heating
 furnaces, control of the consumption ratio of air and gas, pressure
 regulation in the working chamber of the furnace, automatic switch-
 ing of valves and automatic switching off of gas and air. For an
 optimum control and regulation thermoelements and radiation pyro-
 meters are used simultaneously. In the second part of this paper
 the thermal control and automation of the three-zonal methodical
 furnaces LPTs-1 of the sheetrolling mill Nr 1 are described. It

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PA - 2385

Performance Practice of Automation of the Rolling Mills Heating Installations.

was found in this connection that radiation pyrometers are better suited for controlling temperature than the thermoelements. Formerly these furnaces worked with mazout. Transition to fuelling with mixed gas reduced waste caused by sediments from 1,7 to 1 %. After the introduction of automation there was therefore no longer any waste at all. The present automation scheme is, however, not without faults.

ASSOCIATION: Metallurgical Combine of Magnitogorsk
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress.

Card 2/2

S/182/60/000/008/006/010
A161/A029

AUTHORS: Kulakov, A.M.; Kokin, A.G.

TITLE: A Combination Die

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No. 8, p. 46

TEXT: The making of a stuffing box cover formerly took four operations:
a) cutting the 220-mm diameter billet out of the strip; b) extrusion with central portion lowered; c) punching the center hole; d) cutting the edge to 18-mm height. The three first operations were performed in a special die, the last on a lathe. A.G. Kokin has designed a combination die performing all four operations in a single press stroke. It is pointed out in an editorial note that the die is not free of faults: the trimmed cover edge is pointed, and the grinding of the blunted punching die is difficult. There are 2 figures. ✓

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A Combination Die

Figure 2. Combination Die: a - position prior to cutting the 220-mm billet; b - position prior to punching the 82-mm opening; c - position after final extrusion of the 165-mm cover, shaping of the 132-mm cavity, punching of the 82-mm opening and cutting of the butt to a height of the part of 18 mm.

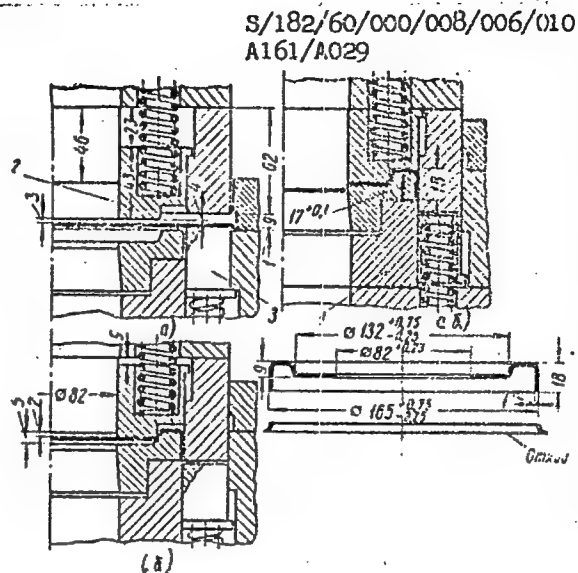


Рис. 2. Комбинированный штамп:

а — положение перед вырубкой заготовки диаметром 220 мм; б — положение перед пробивкой отверстия диаметром 82 мм; в — положение после окончательной вытяжки копки диаметром 165 мм, формовки впадины диаметром 132 мм, пробивки отверстия диаметром 82 мм и обрезки торца до высоты детали 18 мм.

Card 2/2

IVANOV, Nikolay Ivanovich; KULAKOV, Aleksey-Maksimovich; TELEGIN, A.S.,
retsenzent; ARSEYEV, A.V., red.; KRYZHOVA, M.L., red. izd-va;
MATIYUK, R.M., tekhn. red.

[Efficient fuel combustion in metallurgical furnaces; from practices
of the Magnitogorsk Metallurgical Combine] Ratsional'noe szhiganie
topliva v metallurgicheskikh pechakh; iz opyta Magnitogorskogo metal-
lurgicheskogo kombinata. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-
ry po chernoi i tsvetnoi metallurgii, 1961. 139 p. (MIRA 14:11)
(Magnitogorsk—Metallurgical furnaces—Combustion)

S/133/61/000/003/002/011
A054/A033

AUTHORS: Dikshteyn, Ye. I.; Goncharevskiy, Ya. A.; Zuts, K.A.; Antipin, V. G.; Kozhanov, M. G.; Zarzhitskiy, Yu. A.; Kulakov, A. M.;

TITLE: Mastering the operation of a 500-ton open-hearth furnace fired by coke-oven gas and mazut

PERIODICAL: Stal', no. 3, 1961, 210 - 211

TEXT: The 500-ton open-hearth furnace designed by the "Stal' proyekt" operates according to the scrap-ore process and is fired by cold coke-gas (1100 cal/m^3) and mazut (9600 cal/kg). The principal data of the furnace are: charge 500 - 550 tons, hearth area 105 sq m, depth of the bath 1.2 m, height (over the altar level) of the crown 3.15 m, of the air partition 1.35 (1.2) m, stack height 90 m. The results obtained by the furnace design and firing system could be improved by incorporating several modifications. For instance, there are two gas-mazut burners, one on either side of the furnace. This is a simple structural solution but did not prove very effi-

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Mastering the operation of a

S/133/61/000/003/002/01h
A05h/A033

cient. By applying two or three burners on either side of the furnace this situation could be improved. The blast produced is not enough to ensure the heat conditions required. The vacuum produced by the stack and wasteheat boiler (60 and 75 mm water column, respectively) is inadequate to efficiently evacuate the gaseous combustion products from the operating area of the furnace. The efficiency of the blast system is unfavourably affected by losses in the cold-air exhaustion system through the slag chambers, which require a better insulation. The heat transfer capacity of the torch was also unsatisfactory. Carbon monoxide in the combustion products in the vertical channel already disappeared when there was 3 - 3.5 % oxygen present, indicating an inadequate mixing of fuel and air. In order to improve the mixing and radiation capacity of the torch, compressed air was introduced separately through a special tube. This, however, did not solve the problem and had to be put down to the wrong type of feed-opening. Tests were also carried out to raise the heating capacity of the torch by improving the operation of the pulverizer, by means of increasing its capacity, i.e., the consumption of high-pressure steam in the pulverizer. The radiation capacity of the torch for cold coke-gas and mazut depends largely on the ratio at which these two fuels are consumed. For the furnace in question the optimum

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Mastering the operation of a

S/133/61/000/003/002/011;
A05h/A033

condition for the torch was obtained when 1700 - 1800 kg/h mazut was consumed and when the thermal load of the furnace amounted to 40 mill. cal/h, (Fig. 6). Tests carried out to improve the furnace operation by increasing the heat load to 50 mill. cal/h only resulted in greater wear, without improving the operational conditions. Actual improvement was obtained by decreasing heat losses through the stoke holes, amounting to 2 mill. cal/h, by a suitable insulation and by feeding 1800 - 2000 Hm^3/h compressed air into the torch, thus increasing its temperature to 1850°C and distributing it more uniformly along the torch. By increasing the heating capacity of the torch, the time required for the optimum heating of the charge and for burning out carbon was reduced. By intensifying the thermal conditions of the furnace, desulfurization became more intensive and it was possible to smelt 08 k17 (08kp) grade steel in the furnace. Although the reconstruction of the furnace and the application of modifications improved and stabilized the operation of the 500-ton mixed fuel furnace, the burner system will still have to be modified and a suitable method to be applied for preparing the gas, in order to change over from mixed fuel to gas-firing only. There are 9 figures and 2 tables.

Card 3/3

KOZHANOV, M.G.; RASHEVICH, A.Ya.; KAZAKOV, A.I.; KULAKOV, A.M.

Washing the regenerator checkerwork of large-capacity open-hearth furnaces. Metallurg 6 no. 1:17-18 Ja '61. (MIRA 14:1)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Open-hearth furnaces--Maintenance and repair)

DIKSHEYN, Ye.I.; GONCHAREVSKIY, Ya.A.; ZUTS, K.A.; ANTIPIN, V.G.;
KOZHANOV, M.G.; ZARZHITSKIY, Yu.A.; KULAKOV, A.M.

Mastering the operation of 500-ton open-hearth furnaces on
coke gas and fuel oil [with summary in English]. Stal'21
no.3:210-214 Mr '61.

(Open-hearth furnaces--Combustion)

(MIRA 14:6)

AGRE, V.L.; AL'DIYEVA, K.N.; ANANYAN, V.V.; BERLIN, R.I. [deceased];
ISTOMIN, A.V.; KAGAN, I.A.; KRONGAUZ, N.D.; KULAKOV, A.M.;
MARKOV, V.P.; MATVEYEV, Yu.M.; NESVETAYEV, A.M.; OSIPOV, A.P.
[deceased]; POZIN, M.S.; FAYNSHTEYN, V.M.; SHAPIRO, B.S.;
SHEVCHENKO, N.A.; SHCHIRIN, V.N.; AL'SHEVSKIY, L.Ye., kand.
tekhn.nauk, red.; VLADIMIROV, Yu.V., red.izd-va; MIKHAYLOVA,
V.V., tekhn.red.

[Rolling and pipe mills] Prokatnoe i trubnoe proizvodstvo.
Pod red. L.E.Al'shevskogo i A.V.Istomina. Moskva, Gos.nauchno-
tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1962.
246 p. (MIRA 15:2)

1. Moscow. Tsentral'nyy institut informatsii chernoy metallurgii.
(Rolling mills) (Pipe mills)

IVANOV, N.I., kand.tekhn.nauk; KULAKOV, A.M., inzh.; SHAKHLIN, V.I., inzh.;
GAZHUR, F.G., inzh.; NADYRSHINA, L.S., inzh.; TVILINEV, F.Ya., inzh.

Flame stands for the investigation of thermal processes in furnaces.
Stal' 22 no.8:759 Ag '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Metallurgical furnaces—Combustion)
(Heat—Transmission)

VORONOV, F.D.; TRIFONOV, A.G.; KHUSID, S.Ye.; DIKSHTEYN, Ye.I.; VAL'PITER, E.V.
SNEGIREV, Yu.B.; ANTIPIN, V.G.; Primali uchastiye: SMIRNOV, L.A.;
KAZAKOV, A.I.; YELIZAROV, A.G.; KULAKOV, A.M.; KOZHANOV, M.G.;
ZARZHITSKIY, Yu.A.; ARTAMONOV, M.P.; GOL'DENBERG, I.B.; ROMANOV,
V.M.; NOVIKOV, S.M.; MAYEVSKIY, A.B.; DMITRIYEV, I.; MANZHULA, M.;
BEREZOVY, I.A.; ZUTS, K.A.; BADIN, S.N.; TATARINTSEV, G.;
MITROFANOV, N.G.; GAVRILOVA, K.M.; IVANOV, N.I.

Operating a 400-ton open-hearth furnace on casing-head gas.
Stal' 20 no. 7:594-598 J1 '60. (MIRA 14:5)
(Open-hearth furnaces--Equipment and supplies)

VORNOV, F.D.; BIGEYEV, A.M.; DIKSHEYN, Ye.I.; TRIFONOV, A.G.; KAZAKOV, A.I.; KOROLEV, A.I.; BORODIN, G.L.; ANTIPIN, V.G.; KULAKOV, A.M.; KOZHANOV, M.G.; GAZHUR, V.F.

Investigating the operation of 400-ton open-hearth furnaces following redesign. Stal' 22 no.10:904-907 0'62. (MIRA 15:10)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy gorno-metallurgicheskiy institut.
(Open-hearth furnaces)

VECHER, Nikolay Aleksandrovich; IVANOV, N.I., retsenzent; KULAKOV,
A.M., retsenzent; LEPINSKIKH, B.M., red.; BAS'YAS, I.P.,
red.; MIKHAYLIKOV, S.V., red.; TELEGIN, A.S., red.;
BUR'KOV, M.M., red.izd-va; ISLENT'YEVA, P.G., tekhn. red.

[Highly efficient open-hearth furnace performance] Vysoko-
proizvoditel'naya rabota martenovskikh pechei. Moskva,
Metallurgizdat 1963. 270 p. (MIRA 16:8)
(Open-hearth furnaces)

SHAKHLIN, V.I.; SHUNIN, T.G.; TARASOV, A.F.; KULAKOV, A.M.; IVANOV, N.I.;
NEKRASOV, K.D.; SALMANOV, G.D.

Using heat-resistant concrete in the elements of bricklaying of
open-hearth furnaces. Ogneupory 28 no.8:364-367 '63. (MIRA 16:9)

1. Magnitogorskiy metallurgicheskiy kombinat (for Shakhlin, Shu-
nin, Tarasov, Kulakov). 2. Magnitogorskiy gorno-metallurgiches-
kiy institut (for Ivanov). 3. Nauchno-issledovatel'skiy institut
betona i zhelezobetona Akademii stroitel'stva i arkhitektury
SSSR (for Nekrasov, Salmanov).

KHUSID, S.Ye., inzh.; ZARZHITSKIY, Yu.A., inzh.; KULAKOV, A.M., inzh.;
KARPOV, A.A., inzh.; KROLENKO, N.A., inzh.; Primalni uchastiye:
ALIMOV, B.V.; LEONT'YEV, A.I.; BOLOBORODOV, N.M.; KARAGANOV, G.G.;
GUR'YANOV, V.N.; OSOKIN, G.F.; KAYZER, V.G.; SOROKOLETOV, A.M.;
ZLOBIN, V.K.; VIKTOROVA, T.Ye.; SEMENOV, V.A.; VODENNIKOV, V.F.;
SANAYEV, I.K.

Operating a four-zone holding furnace on natural gas with auto-
matic control. Stal' 25 no.5:464-468 My '65.

(MIRA 18:6)

1. KULAKOV, A. P.
2. USSR (600)
4. Skyscrapers - Moscow
7. Skyscraper at Krasnye Vorota. Gor. khoz. Mosk. No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

KULAKOV, A. P.

KULAKOV, A. P.

Work of the Engineering Council of the Ministry of Construction
for the Transportation Industry. Transp.stroi. 7 no.10:30-32
0 '57. (MIRA 10:12)

1. Zamestitel' Predsedatelya Tekhnicheskogo soveta Mintransstroya.
(Transportation) (Construction industry)

KULAKOV, A.S.

Physical development of newborn infants in Lesogorsk District,
Sakhalin Province, from 1955 to 1958. Pediatria 38 no. 7:25-27
51 '60. (MIRA 14:1)

(LESOGORSK DISTRICT (SAKHALIN)--INFANTS (NEWBORN))
(INFANTS--GROWTH)

KULAKOV, A.V.

Calculating the winding ratio on linen looms. Izv.vys.ucheb.zav.:
tekh.tekst.prom. no.4:3-8 '58. (MIRA 11:11)

1. Kostromskoy tekstil'nyy institut.
(Looms) (Linen)

5/668/60/000/001/003/006
E071/E433

AUTHORS: Oshurkova, L.S., Kulakov, A.V. and Mykol'nikov, I.A.

TITLE: Production of High-Grade Heavy Pyridine/Bases

PERIODICAL: Koks i khimiya, 1960, No.1, pp.42-43

TEXT: The development of the process of extraction of heavy pyridine bases from creosote and naphthalene oils on the Kuznetsk Works is outlined. The extraction of bases is done with a 20% sulphuric acid. It was found that the maximum amount of bases is extracted and the process is not accompanied by the formation of acid tar if the coefficient of excess of acid during the washing of the creosote fraction is 1.1 and on washing of naphthalene oil 1.7 to 1.8. Under these conditions, the content of free acids in the pyridine sulphate decreased from 6 to 2.8%. In order to produce pyridine bases conforming to ГОСТ 7922-56 (GOST 7922-56) (Grade A) a two stage method of decomposition was adopted:

- a) preliminary decomposition consuming 30 to 40% of alkali, in which the removal of impurities naphthalene and oil takes place and
- b) final decomposition - yielding high quality pyridine bases.

A careful settling of pyridine bases of the first decomposition stage before their separation from the purified sulphate and the

Card 1/2

S/068/60/000/001/003/C06
E071/E433

Production of High-Grade Heavy Pyridine Bases

cleanliness of the residue are very important. It is advantageous to carry out the second stage of decomposition to a weakly acid reaction (0.4 to 0.5%) since in a neutral or alkaline medium an emulsion is formed which is difficult to break by settling or heating to 60°C. Pyridine bases separated in the second stage exceed standards in their water content. It was found after some trials that the most suitable and cheap drying agent is ammonium sulphate which is used in a proportion of 3% on pyridine bases. Dehydration is done at a temperature of 32 to 34°C. Experimental results obtained during the development of the practice are tabulated. It is pointed out that the washing tanks were fitted with a new type of vertical, stainless steel reheater coils. These were found to be effective and can be maintained without stoppages of the washing plant. There are 1 table and 4 Soviet references.

ASSOCIATION: Kuznetskiy metallurgicheskiy kombinat
(Kuznetsk Metallurgical Combine)

Card 2/2

KULAKOV, A.Ya., inzh.

Cast dismountable scrapers. Bezop.truda v prom. 1 no.10:31-32
0 '57. (MIRA 10:11)

(Dzhezkazgan--Mining machinery)

KULAKOV, A.Ya.

Comparative testing of scrapers at the Dzhezkazgan mine. Izv. AN
Kazakh. SSR. Ser. gor. dela, met., stroi. i stroimat. no.2:109-114
'57. (MLRA 10:9)
(Dzhezkazgan--Mining machinery--Testing)

BAKAYEV, M.T.; KULAKOV, A.Ya.

Supporting and controlling the roofs of chambers in Dzhezkazgan
mines. Izv. AN Kazakh. SSR. Ser. gor. dela no.1:105-108 '58.

(MIRA 16:5)

(Dzhezkazgan District--Mine roof bolting)

SHARIPOV, Vakhit Sharipovich; MUZGIN, Sergey Spiridonovich; BUPEZHANOV, Mukhit Kuldzhanovich; TKACHENKO, Artem Mikhaylovich; ARTAMONOVSKIY, Oleg Yur'yevich; KULAKOV, Arkadiy Yakovlevich. Prinimali uchastiye: KAZYBEKOV, D.M.; IBRAYEV, Sh.I.; ISTOMIN, S.N., otv.red.; GEYMAN, L.M., red.izd-va; SIFYAGINA, Z.A., red.izd-va; SAL'TSOVSKIY, M.S., red.izd-va; MAKSIMOVA, V.V., tekhn. red.

[Self-propelled machines for underground workings of ore deposits] Samokhodnye mashiny dlia podzemnoi razrabotki rudnykh mestorozhdenii. By V.Sh.Sharipov i dr. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1961. 258 p. (MIRA 14:12)

(Mining machinery)

SHARIPOV, V.Sh.; KUNTUKOV, Yu.G.; KULAKOV, A.Ya.

System of sublevel caving using self-propelled equipment to work
pitching ore bodies (applicable to the Atasu Mine). Trudy Inst.
gor.dela AN Kazakh.SSR 9:154-156 '62. (MIRA 15:8)
(Atasu region—Mining engineering—Equipment and supplies)

KULAKOV, A.Ya.

Determination of the productivity of a scraper apparatus in
chamber-type workings. Trudy Inst.gor.dela AN Kazakh.SSR 9:157-
162 '62. (MIRA 15:8)

(Mining machinery)

YESHPANOV, D.O.; KULAKOV, A.Ya.

Breaking off ore through small diameter blastholes in
Dzhezkazgan with the use of self-propelled equipment.
Trudy Inst. gor. dela AN Kazakh. SSR 13:78-84 '64.
(Mir: 17:7)

TRUDY, A.Ya., P. SPANOV, D.O.

Variant method of mining thin seams in sections of the
Dznezkazgan Mine with the use of self-propelled equipment.
Trudy Inst. gor. dela AN Kazakh. SSR 13:152-155 '64.
(MINA 17:7)

1. 50350585

ACCESSION NR: AP5013469

UR/0240/65/000/005/0015/0020

613,155,3 : 615,778,3-009-002,259

Nov, A. Ye.

TITLE: Effect of hexamethylenediamine in low concentrations on experimental animals in chronic inhalation poisoning.

Source: Zhurnal i sanitariya, no. 5, 1965, 15-20

TOPIC: hexamethylenediamine, poisoning

ABSTRACT: Continuous inhalation for 3 months of hexamethylenediamine (HMD) in a concentration of 1 mg/m³ had adverse effects on 60 white rats expressed as slight weight loss, increase in number of reticulocytes, eosinophilia, elevated leukocyte count, increased fluorescence, suppression of phagocytosis and formation of Vi-antibodies after artificial immunization, and impairment of the normal motor cholinergic correlation between muscle antagonists. In a concentration of 0.04 mg/m³, HMD had the same effect, except that the animals' weight and number of reticulocytes were not affected. However, a concentration of 0.001 mg/m³ had no effect whatever.

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1. 08 Jul 64

ACCESSION NP: AP5013469

This last, then, should be the daily average maximum level of concentration in
contaminated places.

Institut d'hygiène et de médecine préventive, 125, N. N. Ovsyannikova St.,
Moscow (Institute of General and Community Hygiene, AMN SSSR)

SUBMITTED: 08Jul64

ENCL: 00

SUB CODE: LS

NO REF SOV: 008

OTHER: 000

Card 2/2

3/056/60/036/52/20/061
3006/3011

246210

AUTHORS:

Irranov, M. M., Vorobeychikov, A. I., Vorobeychikov, S. I.,
Kirillov, A. D., Kizilov, I. A., Kizilov, S. I., Kizilov, I. A.,
Maklakov, Iu. A., Savin, I. A., Salimov, G. Y., Stranov,
L. P., Chuvilo, L. P.

TITLE: Channel for Antiprotons With a Momentum of 2.8 Bev/c

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1963,
Vol. 36, No. 2, pp. 445-448

TEXT: The authors of the present paper describe a channel built for the investigation of the interaction of antiprotons in a closed chamber. Antiprotons were produced by 3-bev protons in a target. Fig. 1 is a schematic representation of the channel described in a target. Fig. 1 is a schematic representation of the channel described in a target. The antiprotons were identified from their velocity ($\beta \approx 0.95$) by means of three Cherenkov counters, each of which was provided with two photomultiplier tubes of the type 33-35 (PDU-3) whose efficiencies are specified in Table 1. The efficiencies obtained with different coincidence combinations are given in Tables 2 and 3. Fig. 2 shows a block diagram of the electronics

Channel for Antiprotons With a Momentum of 2.8 Bev/c
3/056/60/036/52/20/061
3006/3011

system, and respective data are supplied in Table 4. The efficiency of the channel described with respect to antiprotons is found to be 10^{-4} . Some tests are briefly described next. By the system described here, the authors determined the ratio of the number of p with momenta of (2.8-3.2) Bev/c to the number of all remaining particles (which were chiefly π^- mesons) from the beryllium target (16 g/cm^2) under the angles 0 and 7° , and from a copper target ($\sim 10\text{ g/cm}^2$) under 7° with respect to the primary proton beam (2.8-3.2 Bev). At an intensity of 10^5 of the inner beam, an average of 1 p was recorded within four minutes. Results:

Angle	target	proton beam	particle num- ber in the channel	relative number of anti- protons in the beam
0°	Be	10^5	1000	$(1.01 \pm 0.13) \cdot 10^{-4}$
7°	Be	10^5	~ 700	$(1.37 \pm 0.18) \cdot 10^{-4}$
7°	Cu	10^5	~ 700	$(2.42 \pm 0.53) \cdot 10^{-4}$

The number of particles recorded in the channel agrees with data concerning Card 2/3

Channel for Antiprotons With a Momentum of 2.8 Bev/c
3/056/60/036/52/20/061
3006/3011

ing 3-bev proton interactions in emulsions (Ref. 4). The increase in the relative number of antiprotons in the transition from 0° to 7° in the laboratory frame agrees with predictions made on the strength of the statistical theory. By considering pion absorption ($\sigma_p \sim 35\text{ mb}$) and antiproton absorption ($\sigma_{\bar{p}} \sim 60\text{ mb}$) as well as the attenuation of the beam of primary protons ($\sigma_{\text{pion}} \sim 30\text{ mb}$), the ratio of the differential production cross sections of \bar{p} and π^- mesons with 2.8 Bev/c under 0° in the laboratory system is found to be $\frac{d\sigma_{\bar{p}}}{d\Omega} / \frac{d\sigma_{\pi^-}}{d\Omega} \sim 1.5 \cdot 10^{-4}$.

There are 2 figures, 5 tables, and 4 references: 3 Soviet, 1 Italian, and 1 International (CERN).

1350217208: Ob'yedinennyy institut yadernykh issledovaniy
(Joint Institute of Nuclear Research)

17-2417208: September 3, 1953

Card 3/3

Kulakov, B. A.

VOVENKO, A.S.; GOLOVANOV, L.B.; KULAKOV, B.A.; LYUBIMOV, A.L.; MATULENKO, Yu.A.; SAVIN, I.A.; SMIRNOV, Ye.V.

[Total cross sections of π^- -meson interaction with protons at high energies] Polnye secheniia vzaimodeistviia π^- -mezonov s protonami pri vysokikh energiakh. Dubna, Ob"edinennyi institut iadernykh issledovani, 1961. 11 p. (MIRA 14:11)

(Mesons)

(Protons)

VOVENKO, A.S.; KULAKOV, B.A.; LIKHACHEV, M.F.; LYUBIMOV, A.L.; MATYLENKO,
Yu.A.; SAVIN, I.A.; STAVINSKIY, V.S.

[Differential Cherenkov gas counters] Differentsial'nyi gazovyi
cherenkovskii schetchik. Dubna, Ob"edinennyyi institut iadernykh
issledovaniy, 1961. 11 p. (MIRA 14:10)
(Nuclear counters)

20677

S/120/61/000/001/008/062
E032/E314

21.5300

AUTHORS: Belyakov, A.N., Vovenko, A.S., Kirillov, A.D.,
Kulakov, B.A., Lyubimov, A.L., Matulenko, Yu.A. and
Savin, I.A.

TITLE: Gas-filled Threshold Cherenkov Counters for
Accelerator Experiments

PERIODICAL: Pribery i tekhnika eksperimenta, 1961, No. 1,
pp. 32 - 35

TEXT: The velocity analysis of fast particles ($\beta \sim 1$) by
Cherenkov counters, using the dependence of the threshold or
angle of Cherenkov emission on the velocity, is possible if
the refractive index of the medium is close to unity. This
condition is satisfied only by gaseous media. The present
paper describes two gas-filled Cherenkov counters. One of
them (supplied by Yu.A. Troyan, L.S. Okhrimenko and
S.V. Mukhin) was an experimental counter which was used in
studies designed to establish whether it is possible to
separate out rare particles against a background of other
particles. The second counter was designed for work in the

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Gas-filled Threshold

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E032/E314

1 - and K-meson beams of the synchrophasotron of the Joint Institute for Nuclear Research. The first of the above counters is shown in Fig. 1, in which 1 - is the steel body, 2 - is a glass tube 30 mm in diameter and covered with a film of aluminium on the inner surface, 3 - is a hollow light pipe, 4 - is a perspex window and 5 - is an FEU-33 (FEU-33) photomultiplier. Fig. 2 shows the second of the above counters, in which 1 is the steel body, 2 is a polished dural tube, 80 mm in diameter and coated with an organic film and then an aluminium film on the inner surface, 4 is a quartz window and 5 is an FEU-33 photomultiplier. The first counter (C_1) was used in the π^+ meson beam of the synchrocyclotron of the Joint Institute of Nuclear Research. The energy was 300 MeV. The second counter (C_2) was used in the beam of positive particles of the synchrophasotron of the above institute (largely π^+ -mesons and protons) the momentum being ~ 3 GeV/c. In both cases, the Cherenkov counter was

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Gas-filled Threshold

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connected in coincidence with a scintillation monitor telescope whose counters had a diameter slightly smaller than the diameter of the Cherenkov counter. The Cherenkov counter was arranged as shown in Fig. 3. C in this figure represents the scintillation counters, YP la represent amplifiers, the rectangular block in the centre of the figure indicates the position of the Cherenkov counter and the three rectangular blocks on the righthand side of the figure are coincidence circuits with resolving times as indicated. In these experiments the ratio $m = N_2/N_3$ was measured. Fig. 4 shows the ratio m as a function of pressure in atmospheres for the C_1 counter (filled with air). Curve a refers to a kinetic energy $E_k^{\pi^+} = 297$ MeV and Curve b to $E_k^{\pi^+} = 280$ MeV .
 $p_{\mu}^a, p_{\mu}^b, p_{\pi}^a, p_{\pi}^b$ indicate the threshold pressures of the a and b curves for μ and π -mesons, respectively. Curve b was taken with a telescope containing a Cherenkov counter which was more sensitive to μ -mesons than π -mesons.

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Gas-filled Threshold

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E032/E314

Fig. 5 shows the ratio m as a function of pressure in atm. for the C_1 counter filled with ethylene

($E_k^+ = 392$ MeV). It is clear from Figs. 4 and 5 that it is possible to separate out μ -mesons in a beam of π -mesons. Fig. 6 shows the dependence of m on the pressure for the C_2 counter filled with air. This curve was obtained for a beam containing 40% π -mesons and 60% protons. p_μ and p_π show the threshold pressures for μ - and π -mesons. It is concluded that particle separation is possible with these counters. There are 6 figures and 1 non-Soviet reference.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy
(Joint Institute of Nuclear Research)

SUBMITTED: February 13, 1960

Card 4/7

VOYENKO, A. S., KULAKOV, B. A., LIKHACHEV, M. F., MATUSENKO, Yu. A., LYUBIMOV, L. L.,
SAVIN, I. A., SMIRNOV, E. V., and STAVINSKIY, M. S.

"Elastic Scattering of η -Mesons on Hydrogen on the 180° Angle"

Report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

Joint Institute for Nuclear Research
Laboratory of High Energies, Dubna, 1962

Relativistic, L.H.
VOYENKO, A. S., KULAKOV, B. A., LINGAROV, M. F., LYUBIMOV, S. L., PAKHOMOV, V. A.,
SAVIN, I. A., SMIRNOV, Ye. V., SLAVINSKIY, V. S., YUEN-CHANG, Shi, YUAN-FU, Hse

"Inelastic Interactions of K^+ - Mesons with Hydrogen"

report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

Joint Institute for Nuclear Research
Laboratory of High Energies, Dubna, 1962

~~KULAKOV, B. A.~~, LIKHACHEV, M. F., MATULENKO, Yu. A., SAVIN, L. A., SMIRNOV, Ye. V.
and STAVINSKIY, V. S.

"Total Cross-Sections of K^+ - Mesons with Hydrogen at the Momenta From
3, 0 to 5, 0 GeV/c"

report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

Joint Inst. for Nuclear Research
Lab. of High Energies, Dubna, 1962

S/120/62/000/002/009/047
E039/E520

AUTHORS: Vovenko, A.S., Kulakov, B.A., Likhachev, M.F.,
Lyubimov, A.L., Matulenko, Yu.A., Savin, I.A. and
Stavinskiy, V.S.

TITLE: A differential gas Cherenkov counter

PERIODICAL: Pribery i tekhnika eksperimenta, no.2, 1962, 49-52

TEXT: A detailed description is given of a differential
gas Cherenkov counter developed in the high energy laboratory of
OIIYaI in 1959 and used in the beam of the synchrophasotron for
the detection of K-mesons in pulses of 3-5 GeV. Cherenkov
radiation from particles moving through the gas in the counter is
focused by a spherical aluminium coated mirror onto a circular
diaphragm placed in front of a perspex plug through which the
light passes and is detected with a $\Phi\Phi\gamma$ -24 (FEU-24) photo-
multiplier. The plane of the photocathode is perpendicular to
the direction of the particle beam, which has a maximum diameter
of 10 cm, and the axis of the photomultiplier is displaced about
12 cm from it. A more detailed discussion of the optical
aberrations is given. The radiation tube is about 1.5 m long and
is lined with black velvet to reduce the background count; this
Card 1/2

A differential gas Cherenkov counter S/120/62/000/002/009/047
E039/E520

reduced the effective working length to 0.7 m. A photomultiplier with high quantum efficiency and large amplification is necessary and the electronic circuitry is sensitive to a pulse corresponding to one photoelectron from the cathode of the photomultiplier. The variation of efficiency with air pressure was determined and it is shown that a background count appears at pressures greater than ~ 25 atm. This background can be reduced further, to ~ 1 to 2%, by using gases such as ethane and ethylene. Peak efficiency is at about 10 atm for air and K-mesons and π -mesons can be separated in pulses up to 6 GeV/s. There are 4 figures.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy
(Joint Institute for Nuclear Research)

SUBMITTED: August 17, 1961

Card 2/2

24.6600

35559
S/056/62/042/003/011/049
B104/B102

AUTHORS: Vovenko, A. S., Golovanov, L. B., Kulakov, B. A.,
Lyubimov, A. L., Mamulenko, Yu. A., Savin, I. A., Smirnov, Ye. V.

TITLE: Total π^- -p interaction cross sections at high energies

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,
no. 3, 1962, 715 - 720

TEXT: $\sigma_t(\pi^-, p)$ was determined for proton momenta of 3.4, 3.9, 4.9, 7.0, and 9.2 BeV/c. The experimental arrangement is shown in Fig. 1. The total interaction cross section decreased between 3.5 and 7 BeV/c. Measurements at higher energies have not clearly shown whether the decrease of $\sigma_t(\pi^-, p)$ is only characteristic of the range investigated, or the behavior is an asymptotic one (Table). A comparison with other results has shown that $\sigma_t(\pi^+, p)$ and $\sigma_t(\pi^-, p)$ are equal in the range of 4-5 BeV within the accuracy attained. Assuming that $\sigma_{\pi}/\sigma_y = (\text{Im}A_{\pi}^0/\text{Im}A_y^0)^2$, the charge exchange is estimated with the aid of relation

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Total π^- -p interaction cross...

S/056/62/042/003/011/049
B104/B102

$$4\pi\lambda \operatorname{Im} A_n^0 = (1/\sqrt{2})[\sigma_t(\pi^-, p) - \sigma_t(\pi^+, p)]$$

$\sigma_{\pi} = 0.012$ and 0.003 , respectively. A_{π}^0 and A_y^0 are the amplitudes of the charge exchange processes ($\pi^0 p \rightarrow \pi^+ n$, $\pi^- p \rightarrow \pi^0 n$) and of the elastic scattering under the angle 0° , σ_{π} and σ_y are the total charge exchange cross section and the elastic scattering cross section. The two values of σ_{π} were obtained at $\sigma_y \approx 5.5$ millibarn with $\sigma_t(\pi^-, p) - \sigma_t(\pi^+, p) = 1$ millibarn, and $\sigma_t(\pi^-, p) - \sigma_t(\pi^+, p) = 2$ millibarn, respectively. The data of other authors (G. von Dardel et al., Phys. Rev. Lett., 7, 127, 1961) are in good agreement with the results obtained here. I. Ya. Pomeranchuk and L. B. Okun' are mentioned. There are 2 figures, 1 table, and 17 references: 11 Soviet and 6 non-Soviet. The four most recent references to English-language publications read as follows: V. N. Gribov, Nucl. Phys., 22, 249, 1961; G. von Dardel et al., Phys. Rev. Lett., 5, 333, 1960; A. S. Vovenko et al., Proc. of the 1960 Ann. Intern. Conf. on High Energy Physics at Rochester, Univ. of Rochester, 1960, p. 443; V. S. Barashenkov et al., Nucl. Phys., 14, 522, 1960.

Card 2/3

Total π^- -p interaction cross...

S/056/62/042/003/011/049
B104/B102

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint
Institute of Nuclear Research)

SUBMITTED: October 10, 1961

Fig. 1. Experimental
arrangement.

Legend: (T) target in the
proton-synchrotron; (ML-7
(ML-7)) four-pole lenses;
(CQ-57 (SP-57)) magnet; (S_1 ,
..., S_3 , S_A , ..., S_C)
scintillation counters; (1)
concrete; (2) lead.

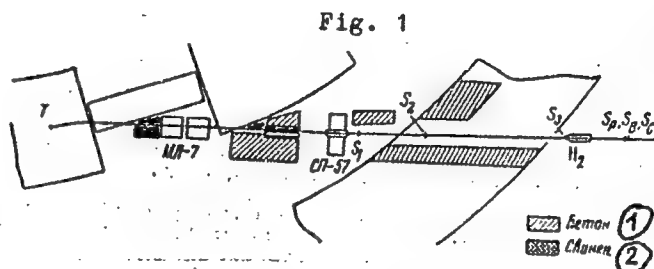


Table. Measurement results.

Legend: (1) momenta of π^- mesons, Bev/c;
(2) $\sigma_t(\pi^-, p)$, millibarn; (3) muon admixture
in the beam, %.

Card 3/3

Table		
(1)	(2)	(3)
3,4	$31,4 \pm 0,7$	$12,4 \pm 0,2$
3,9	$30,0 \pm 0,5$	$12,8 \pm 0,2$
4,9	$29,6 \pm 0,6$	$13,3 \pm 0,2$
7,0	$27,8 \pm 0,8$	$6,5 \pm 0,4$
9,2	25 ± 4	—

VOVENKO, A.S.; KULAKOV, B.A.; LIKHACHEV, M.F.; MATULENKO, Yu.A.; SAVIN, I.A.;
STAVINSKIY, V.S.

Cherenkov gas counters. Usp. fiz. nauk 81 no.3:453-506 N '63.
(MIRA 16:12)

CHAUSOV, Nikita Semenovich, kand.tekhn.nauk; Prinimali uchastiye:
GVOZDIKOV, B.F., inzh.-elektrik; KULAKOV, B.F., inzh.-elektrik;
SBORSHCHIKOV, S.G., inzh.-elektrik; PUKHLYANKO, A.A., inzh.-elektrik;
KORNEYEVA, V.P., tekhnik-elektrik; AYNBERG, V.D., programmist; MEL'NIKOVA,
M.G., programmist; KOZLOVA, R.Ya., programmist; ARKHIPOVA, A.A., programmist
VILKOV, G.N., red.izd-va; MOCHALINA, Z.S., tekhn.red.

[Using electronic computers in calculating engineering constructions
(programming the calculation of shallow shells and beams for the electronic
digital computer "Ural-1")] Primenenie elektronnykh vychislitel'nykh
mashin pri raschete inzhenernykh sooruzhenii (programirovanie rascheta
pologikh obolochek i sterzhnei dlia ETsVM "Ural-1"). Moskva, Gos.izd-vo
lit-ry po stroit., arkhitekt. i stroit. materialam, 1962. 135 p. (Akademiia
stroitel'stva i arkhitektury SSSR. Institut stroitel'nykh konstruksii.
Trudy, no.9). (MIRA 15:8)
(Electronic digital computers) (Elastic plates and shells)
(Beams and girders)

KULAKOV, B.N.; KUZE, S.K.

[Tuberculosis; bibliographical index of the Soviet literature for the period 1957-1960] Tuberkuloze; padomju literaturas bibliografisks saraksts par 1957 - 1960 gadiem. Tuberkulez; bibliograficheski ukazatel' otechestvennoi literatury za 1957-1960 gody. Riga, 1962. 368 p. (MIRA 17:5)

1. Riga. Republikaniska zinatniska medicinas biblioteka.

KULAKOV, D. I.

Khranenie i uchet medikamentov, dezsedstv i khirurgicheskikh instrumentov (Storage and account of medicines, disinfectional means and surgical instruments). Al'ma-Ata, 1959, 56 pages with illustrations (Ministry of Agriculture of Kazakh SSR, Administration of Agricultural Sciences and Propaganda. To assist the veterinary fel'dsher). Free of charge. 4,000 copies. In the Kazakh language.

KULAKOV, D.V., arkhitektor, redaktor; AZRILYANT, Ya.M., redaktor; TOKER,
A.M., tekhnicheskiy redaktor

[Standards for the design of sanatoriums and rest homes] Normy
proektirovaniia sanatoriev i domov otdykha; N-109-53. Moskva,
Gos. izd-vo lit-ry po stroitel'stvu i arkhitekture, 1953. 29 p.
[Microfilm] (MLRA 7:10)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.
(Building--Contracts and specifications)
(Sanatoriums)

KULAKOV, D.V., arkhitekto; redaktor; PEVZNER, A.S., redaktor; TOKER, A.M.,
tekhnicheskiy redaktor

[Sanitation standards for the design of industrial buildings]
Sanitarnye normy proektirovaniia promyshlennykh predpriatii;
N 101-54 (Vzamen NSP 101-51) Moskva, Gos. izd-vo lit-ry po stroit.
i arkhitekture, 1954. 111 p. (MLRA 8:3)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva.

(Sanitary engineering) (Industrial buildings)

IVLHNOV, D V

ARKHANGEL'SKIY, P.Ye., inzhener; ARKHIPOV, P.P., inzhener; VAS'KOV, M.P.,
agronom; ZHMUDSKIY, D.A., arkhitekt; IVANOV, A.P., arkhitekt; KIBI-
REV, S.F., arkhitekt; KRYLOV, N.V., inzhener-arkhitekt; KULAKOV
D.V., arkhitekt; MARTYNOV, P.F., inzhener; NIKIFOROV, V.S., inzhener;
NOSKOV, B.G., arkhitekt; PETUKHOV, B.V., kandidat tekhnicheskikh nauk;
RUDANOV, M.L., kandidat tekhnicheskikh nauk; RYAZANOV, V.S., kandidat
arkhitektury; SOKHRANICHEV, M.S., inzhener-arkhitekt; TARASOV, D.I.,
arkhitekt; SHMIDT, N.E., kandidat arkhitektury; KHOMUTOV, Ye.Ye.,
arkhitekt; VOL'FOVSKAYA, V.N., redaktor; FEDOTOVA, A. F., tekhniche-
skiy redaktor.

[Handbook on the construction of farm buildings] Spravochnik po sel'sko-
khoziaistvennomu stroitel'stvu. Avtorskii kollektiv: P.E.Arkhangel'skii
i dr., avtor-sost. N.V.Krylov. Moskva, Gos.izd-vo sel'khoz.lit-ry. Vol.3
1955. 843 p. (Farm buildings) (MLRA 9:6)

KULAKOV, D., arkhitektor.

New fire prevention standard for planning the building of rural settlements. Sel'.stroil. ll no.2:25-26 F '56. (MLRA 9:7)

1.Otdel norm Gosudarstvennogo komiteta Soveta Ministrov SSSR po delam stroitel'stva.

(Fire prevention--Laws and regulations)

KULAKOV, D., arkhitektor

Using large reinforced concrete elements in building heat and electric
power plants in Hungary. Stroitel' no.1:26-27 Ja '59.

(Hungary--Precast concrete construction) (MIRA 12:3)
(Hungary--Electric power plants)

KULAKOV, D.V., arkhitekt

Large precast reinforced concrete construction elements in the
industrial construction in Hungary. Bet. 1 zhel.-bet. no.9:

434-436 S'60.

(MIRA 13:9)

(Hungary--Precast concrete construction)

KULAKOV, D.V.; OCHKIN, F.V.; KARPOVA, V.V.; SIMAKINA, N.V.; YAGUDIN, Z.Kh.; GREBENSHCHIKOVA, N.F.; CHEZEMUSHKINA, V.M.; YELISEYEV, I.A.; CHERVYAKOVA, A.P.; DEREZOV, A.A.; FEDOTOVA, A.I.; SILKINA, I.V.; NOVIKOVA, V.P.; TANOVA, V.P.; NESVETAYEVA, G.M.; ADSKAYA, V.M.; DRYUCHIN, A.P., otv. red.; KONDRASHOVA, V.I., tekhn. red.
[Economy of Saratov Province in 1960; collected statistics] Narodnoe khoziaistvo Saratovskoi oblasti v 1960 godu; statisticheskii sbornik. Saratov, Gos.stat.izd-vo, 1962. 325 p. (MIRA 15:9)
1. Saratov (Province) Statisticheskoye upravleniye. 2. Nachal'nik Statisticheskogo upravleniya Saratovskoy oblasti (for Dryuchin).
(Saratov Province--Statistics)

KULAKOV, D.V., arkh., red.; GROMOVA, N.M., kand. farmats. nauk,
red.

[Instructions on the designing of drugstores. Approved by
the State Committee for Construction and Architecture At-
tached to the Committee for Construction of the U.S.S.R.
on March 31, 1964] Ukazaniia po proektirovaniu aptek po
grazhdanskomu stroitel'stvu i arkhitekture pri Gosstroie
SSSR 31 marta 1964 g. Moskva, Stroizdat, 1964. 12 p.
(MIRA 17:9)

1. Russia (1923- U.S.S.R.) Komitet po grazhdanskomu
stroitel'stvu. 2. Gosudarstvennyy komitet po grazhdan-
skomu stroitel'stvu i arkhitekture pri Gosstroye SSSR
(for Kulakov). 3. Tsentral'nyy aptechnyy nauchno-issledo-
vatel'skiy institut Ministerstva zdoravookhraneniya S.S.S.R.
(for Gromova).

SMIRNOV, V.P., inzh., red.; KULAKOV, D.V., arkhitekt., red.;
VINOGRADOV, G.M., inzh., red.

[Construction specifications and regulations] Stroitel'-
nye normy i pravila. Moskva, Stroiizdat. Pt.2. Sec.L.
ch.10. [Sanatoriums;; specifications for designs] Sana-
torii; normy proektirovaniia (SNiP II-L. 10-62). 1964. 15 p.
(MIRA 17:10)

1. Russia 1923- U.S.S.R.) Gosudarstvennyy komitet po delam
stroitel'stva. 2. Gosstroy SSSR (for Smirnov) 3. Gosudar-
stvennyy komitet po grazhdanskomu stroitel'stvu i arkhitek-
ture pri Gosstroye SSSR (for Kulakov). 4. Proyektnyy institut
Ministerstva zdravookhraneniya RSFSR (for Vinogradov).

NESOV, V.D., inzh., red.; KULAKOV, D.V., arkh., red.; LELADZE,
G.D., arkh., red.;

[Construction specifications and regulations] Stroitel'-
nye normy i pravila. Moskva, Stroiizdat. Pt.2. Sec.L.
ch.4.[Schools of general education and boarding schools;
design specifications] Obshcheobrazovatel'nye shkoly i
shkoly-internaty; normy proektirovaniia (SNiP II L. 4-62).
1964. 33 p. (MIRA 17:9)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po de-
lam stroitel'stva. 2. Gosstroy SSSR (for Nesov). 3. Gosu-
darstvennyy komitet po grazhdanskomu stroitel'stvu i ar-
khitekture pri Gosstroye SSSR (for Kulakov). 4. Nauchno-
issledovatel'skiy institut obshchestvennykh zdaniy i so-
oruzheniy Gosudarstvennogo komiteta po grazhdanskomu
stroitel'stvu i arkhitkтуры pri Gosstroye SSSR (for
Leladze).

KULAKOV, F.D.

Organizer and technologist of production. Zemledelie 25
no.11:6-10 N '63. (MIRA 17:2)

1. Pervyy sekretar' Stavropol'skogo sel'skogo krayevogo
komiteta Kommunisticheskoy partii Sovetskogo Soyuz.

Kulakov, P.D.

KULAKOV, P.D.

[Separate mowing and thrashing constitute a basic method of grain
harvesting] Razdel'noe skashivanie i obmolot - osnovnoi metod
uborki khlebov. Moskva, Min-vo sel'.khoz. SSSR, 1957. 55 p.

(MIRA 11:1)

(Grain--Harvesting)

KULAKOV, F. M.

h0739

S/120/62/000/004/004/047
E194/E420

AUTHORS: Monoszon, N.A., Stolov, A.M., Gashev, M.A.,
Spevakova, F.M., Xavno, A.Kh., Kornakov, Ye.V.,
Kulakov, F.M., Nadgornyy, V.P., Gorshkova, Ye.G.

TITLE: The supply system for the electromagnet of a proton
synchrotron of 7 GeV

PERIODICAL: Pribery i tekhnika eksperimenta, no.4, 1962, 27-33

TEXT: The article describes the supply system for an electro-
magnet, the field of which increases at the steady rate of
 6.7×10^3 Oe/sec to reach a maximum value of 9300 Oe in 1.55 sec
and then falls off exponentially in 0.8 sec, the repetition
frequency is 10 to 12 cycles per minutes. The voltage on the
electromagnet is increased from 5000 to 10250 V with a maximum
current of 2500 A. An induction motor of 3500 kW, 6 kV,
740 rpm drives through a fluid coupling a 6 phase alternator of
peak output 37500 kW, 8.2 kV, and an auxiliary generator of
250 kW, 380 V for auxiliary supply to the 12-phase ignitron
rectifier. During the current decrement period the rectifier
operates as an inverter. A description of the smoothing circuit
Card 1/2

The supply system for the electro-... S/120/62/000/004/004/047
E194/E420

is given. Particular fault conditions of the circuit are analysed and the protective devices fully described. The performance is illustrated by oscillograms. Schematic and block circuit diagrams are given and an outline drawing of the ignitrons. There are 8 figures. ✓

ASSOCIATION: Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury GKAE (Scientific Research Institute for Electrophysical Apparatus GKAE)

SUBMITTED: April 10, 1962

Card 2/2

24.6730

S/120/62/000/004/030/047
E140/E420

AUTHORS: Kulakov, F.M., Kardash, A.A., Bobovikov, R.S.,
Spevakova, F.M., Gol'din, L.L., Kleopov, I.F.,
Koshkarev, D.G., Radkevich, I.A., Sokolovskiy, V.V.,
Sharnov, B.I.

TITLE: The system for magnetic field correction of the
proton synchrotron.

PERIODICAL: Pribery i tekhnika eksperimenta, no.4, 1962, 158-167

TEXT: The magnetic field configuration in the strong-focused
7 Gev machine is adjusted by a series of correction systems
permitting the betatron oscillation frequency to be controlled
and resonance disturbances of the orbit to be eliminated. The
system used for field correction is described together with the
system for switching and exciting the windings, with experimental
data on their effect on the beam. The windings permit
adjustment of the magnetic field decay index, the azimuthal
asymmetry of the field, compensation of the nonlinear distortion
of the field with saturation, correction of the position of the
neutral plane and the differences between the focusing and
Card 1/2

✓B

The system for magnetic field ...

S/120/62/000/004/030/047
E140/E420

defocusing groups of blocks. There are two sets of these windings, the "gradient" and the "nonlinear" windings on the magnetic pole surfaces facing the chamber. Measured data presented in the article indicate the effectiveness of the corrections in stabilizing the betatron frequency. However, it is considered that further adjustments will be made in the course of the work. There are 15 figures. JB

ASSOCIATIONS: Institut teoreticheskoy i eksperimental'noy fiziki GKAE (Institute of Theoretical and Experimental Physics GKAE)
Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury GKAE (Scientific Research Institute for Electrophysical Apparatus GKAE)

SUBMITTED: March 29, 1962

Card 2/2

L0764

24.6739

S/120/62/000/004/045/047
E039/E420

AUTHORS: Sokolovskiy, V.V., Radkevich, I.A., Gol'din, L.L.,
Kleopov, I.F., Kulakov, F.M., Luzin, V.N.,
Mozalevskiy, I.A., Okorokov, I.S., Talyzin, A.N.,
Trokhachev, G.V.

TITLE: The effect of changes in the regime of the proton
synchrotron supply systems on the magnetic
characteristics of the blocks

PERIODICAL: Pribery i tekhnika eksperimenta, no.4, 1962, 240-244

TEXT: Measurements are made of the effect on the field and
gradient in the C and X-blocks at a level of 90 gauss when the
final smoothing condensers are either disconnected or connected
symmetrically or non-symmetrically; in addition, the case when
the final smoothing condensers are in circuit but the primary
smoothing condensers are reduced to one quarter of their usual
value is examined. The effect of a shunting thyatron and
resistance is also investigated. Changes in the value of the
field caused by any of the above do not exceed $\pm 0.6\%$ while the
difference between blocks is about $\pm 1\%$. The effect of these
Card 1/2

S/120/62/000/004/045/047
E039/E420

The effect of changes ...

circuit changes on the rate of growth of the field covers the range +3.2 to -8.3% and for the difference between blocks +5.2 to -6.9%. Changes of the working range without altering the circuit produce significantly smaller effects than are produced by circuit changes, e.g. changes in the average field of separate blocks are 0.2 to 0.3% while the difference between their fields changes only by 0.02 to 0.05%. The introduction of an auxiliary control on the value of the residual field noticeably increases the accuracy of the results, i.e. error reduced to less than a half its previous value. There are 3 figures and 4 tables.

ASSOCIATIONS: Institut teoreticheskoy i eksperimental'noy fiziki
GKAE (Institute of Theoretical and Experimental
Physics GKAE)
Nauchno-issledovatel'skiy institut elektrofizicheskoy
apparatury GKAE (Scientific-Research Institute of
Electrophysical Apparatus GKAE)

SUBMITTED: April 11, 1962
Card 2/2

ACCESSION NR: AT4035113

S/3092/63/000/001/0018/0043

AUTHOR: Kulakov, F. M.

TITLE: Automatic control system for the electromagnet field of a proton synchrotron

SOURCE: Moscow. Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury*. Elektrofizicheskaya apparatura; sbornik statey, no. 1, 1963, 18-43

TOPIC TAGS: high energy accelerator, proton accelerator, proton synchrotron, electromagnet, automatic control design, strong focusing accelerator

ABSTRACT: In view of the more stringent requirements that the use of strong focusing in the proton synchrotron impose on the magnetic field control, a new control system has been developed that ensures a specified reproducibility of the rise and fall of the field from

Card 1/5

ACCESSION NR: AT4035113

cycle to cycle, maintains the specified tolerances for the high-frequency pulsations in the field rise curve, and provides a field fall-off within a minimum time. The system was actually constructed for the existing SSSR 7 and 0.2 BeV proton synchrotrons, and is being designed for the 70 BeV accelerator now under construction. In view of the different requirements imposed on the system and on the power supply equipment during different parts of the magnetic field cycle, the automatic control system structure is made variable from one part of the cycle to the other. The desired transient quality in the field variation is insured on the rise part of the cycle by introducing a forcing signal into the system and by using control signals proportional to the error and its derivative, derivable from the excitation of the generator and the charging of the filter capacitance. Criteria for the evaluation of the system parameters are spelled out. The required transient quality on the decreasing part of the cycle is attained by proper selection of the parameters. Analytic solutions are derived for the calculation of the transient

Card 2/5

ACCESSION NR: AT4035113

in the automatic control system, permitting the design to be carried out with sufficient accuracy. Orig. art. has: 10 figures and 38 formulas.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 07May64

ENCL: 02

SUB CODE: NP

NR REF SOV: 004

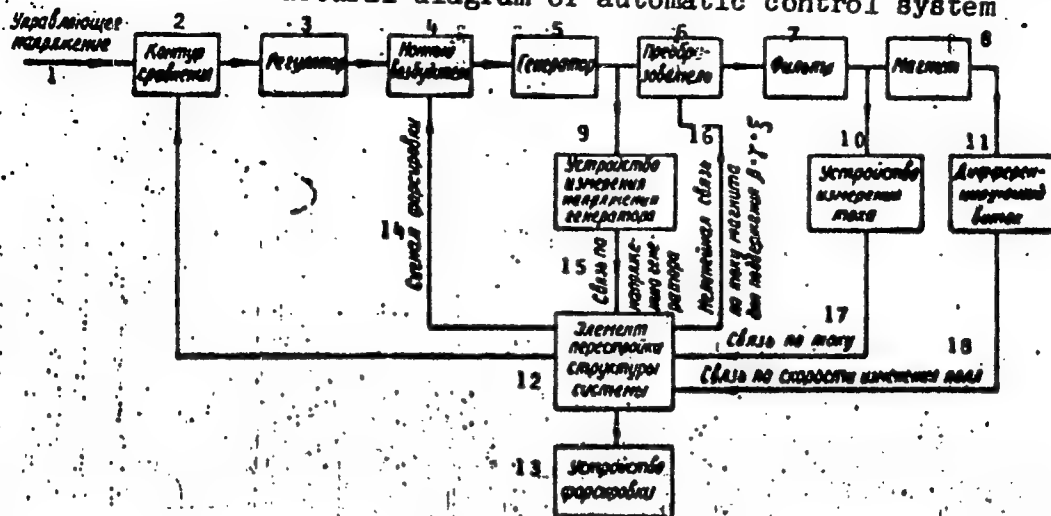
OTHER: 000

Card 3/5

ACCESSION NR: AT4035113

ENCLOSURE: 01

Structural diagram of automatic control system



Card 4/5

Legend for enclosure 01: 1 - control voltage, 2 - comparison circuit, 3 - regulator, 4 - ionic exciter; 5 - generator, 6 - converter, 7 - filter, 8 - magnet, 9 - generator-voltage measuring system, 10 - current measuring system, 11 - differentiating turn, 12 - element for readjustment of system structure, 13 - forcing unit, 14 - forcing signal, 15 - generator voltage feedback, 16 - nonlinear feedback proportional to magnet current, 17 - current feedback, 18 - rate of field variation feedback

Card 5/5

KULAKOV, G., inzh.

Aspect of the shop is changing. Izobr. i rats. no. 6:26-27
Jo '59. (MIRA 12:9)

1. Byuro sodeystviya ratsionalizatsii i izobretatel'stvu
kuznechnogo tsekha Moskovskogo avtozavoda imeni Likhacheva.
(Moscow--Automobile industry)

KONCHAYEV, B., uchastnik oborony Leningrada, KULAKOV, G., uchastnik oborony Leningrada, TAVRID, G., uchastnik oborony Leningrada, GOGIN, N., uchastnik oborony Leningrada, AVRAMKOV, N., uchastnik oborony Leningrada.

Firemen of Leningrad during the siege years ("Lenindraders during the years of siege; 1941-1943") by A.V. Karasev. Reviewed by B. Konchayev and others). Pozh.delo 6 no.6:29 Je '60.

(MIRA 13:7)

1. Rabotniki pozharnoy okhrany Leningrada.
(Leningrad--Siege, 1941-1944) (Firemen)

ALLAN, G. A.

33117

K voprosu o proyektirovani ekonomicheskoto pro ilya volnyenikh slotin.
Gidrotekhnika i melioratsiya, 1949, No 4 c. 53-66.

So: Letovis' Zhurnal'nykh Statey, Vol. 45, Moskva, 1949.

BOBIN, K.P.; GERASIMOV, N.S.; GOLUBEV, S.G.; DEMIDOV, P.G.; DEM'YANENKO, M.P.;
YEVTYUSHKIN, N.M.; ZEMSKIY, M.I.; KALASHNIKOV, K.A.; KONCHAYEV, B.I.;
KOROLEV, A.I.; KRZHIZHANOVSKIY, P.I.; KULAKOV, G.M.; POLOSUKHIN, M.N.;
ROYTMAN, M.Ya.; RUMYANTSEV, V.I.; SEMUSHKIN, B.V.; SMUROV, A.N.;
TARASOV-AGAKOV, N.A.; TOMASHEV, A.I.

Semen Vasil'evich Kaliev; obituary. Pozh. delo 4 no.5:29 My '58.
(Kaliev, Semen Vasil'evich, 1904-1958) (MIRA 11:5)